

MONTHLY WEATHER REVIEW,

JANUARY, 1876.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

The present review of atmospheric phenomena during January, 1876, is based upon—

FIRST, the simultaneous observations, charted three times a day at this office for study and the preparation of the published weather predictions.

SECOND, the reports of monthly means and abstracts from four hundred and forty-eight stations, which are classified as Canadian, Naval Hospitals, Army Post Surgeons, Civilian Volunteers, Marine Records and those of the United States Signal Service.

THIRD, manuscript and printed documents and reliable newspaper reports.

The month of January has been marked by the following general features: First, the high barometric pressure in the South Atlantic, Eastern Gulf States and southern California, but low pressure in Oregon and Canada; Second, high temperature, the excess being particularly marked in the Northwest, Ohio valley and Tennessee; Third, an excess of rain from Arkansas northeastward over the Ohio valley.

BAROMETRIC PRESSURE.

In general.—The general distribution of atmospheric pressure during the month is shown by the isobars upon Chart No. II. The pressure has been higher than in January, 1875, in the South Atlantic States: its distribution over the Northwest and Lake region resembles that which prevailed in January, 1874, but differs entirely from that of January, 1875. The pressure in Oregon averages one-tenth below that of January, 1875; but at San Diego is five hundredths above that of January, 1875, which latter month seems, in these respects, to have been quite abnormal. The paths of the areas of high pressure have been somewhat further to the eastward than during December, 1875. The paths of the areas of low barometer resemble, in many respects, those of January, 1875, having all passed the 95° meridian, between the latitudes 38° and 55°, and the 65° meridian, between the latitudes 42° and 55°.

Areas of Low Barometer.—No. I. The origin of this storm, on the 31st of December, was indicated in the review for the month. During the 1st of January, it moved from Missouri to Lake Huron, and thence, on the 2nd, eastward to the St. Lawrence valley; the lowest recorded pressure at its centre was 29.30, and high winds prevailed over Wisconsin, Iowa, Lake Michigan, Indiana, Illinois, Ohio, Kentucky and Tennessee.

No. II. Originated on the 4th in the Southwest. There prevailed during the 3rd on the Pacific coast very low barometer, with rain, in consequence of which air flowing from the north, from British America, caused the pressure to rise over the Upper Lakes and Northwest during the 3rd, but, the air flowing from the south and east over the Gulf States, after causing a slight rise, was followed by a decided fall over the Southwest and Northwest; the central lowest pressure being in the Missouri valley, as the depression